



Bypass Surgery

Treatment for peripheral arterial disease

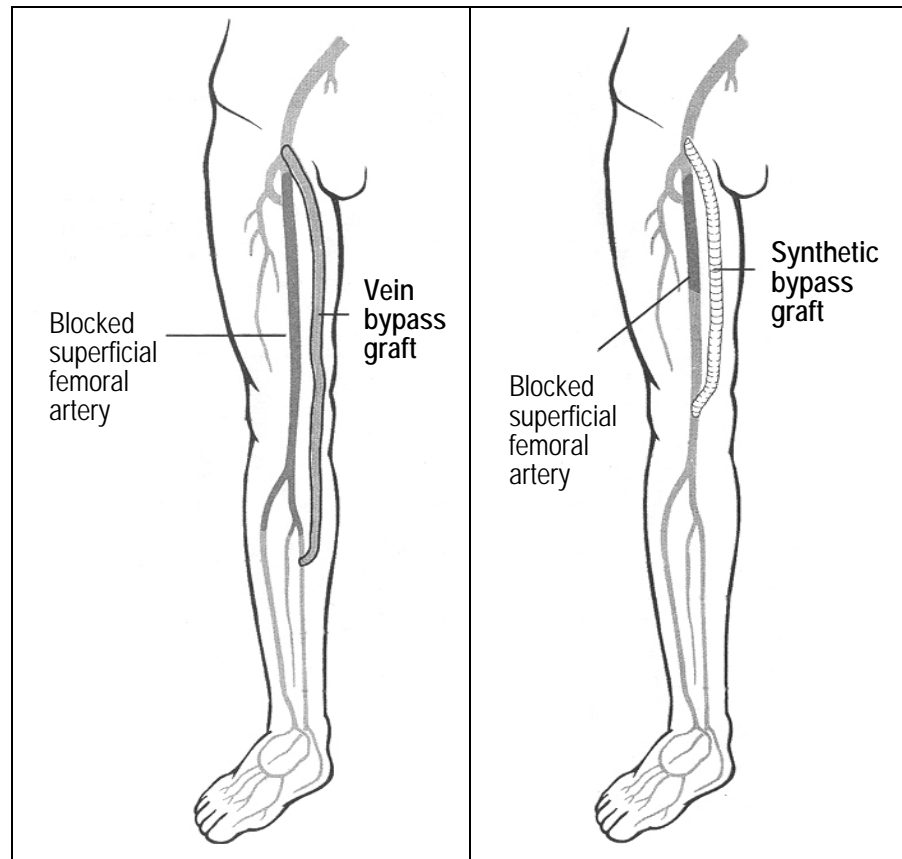
This handout explains the types of bypass surgery that may be done to treat peripheral arterial disease (PAD). It includes care after surgery, foot care, and symptoms to watch for.

What is bypass surgery?

Bypass surgery creates a new route for blood to flow. It is done to repair the blood flow in a leg artery that has long or very severe blockages.

This operation involves inserting a *graft* (replacement part). The graft will be made from a vein in your other leg or from a vein in one of your arms, or it will be a synthetic (man-made) material.

Blood will flow through the graft and *bypass* (go around) the area of narrowing or blockage.



A graft creates a new route for the blood to flow through by going around the area of narrowing or blockage. These illustrations show both a vein bypass graft and a synthetic bypass graft.

The goals of bypass surgery are to:

- Improve your circulation
- Increase how far you can walk
- Relieve pain when you are at rest
- Heal foot ulcers
- Prevent amputation

Bypass Graft

Often, a healthy vein from your other leg or one of your arms is used for the graft. If a vein is not available, synthetic material may be used.

One end of the bypass graft is sewn to the blocked artery above the blockage, and the other end is sewn to it below the blockage. Blood will then flow from the artery, through the bypass graft, back into the artery, and out to the rest of your leg. Once blood is flowing through the graft, the incisions will be closed with staples.

After Surgery

In the Hospital

After your operation, you will be taken to the recovery room. The nurses will check your blood pressure, heart and breathing rates, and the pulses in your feet many times during your recovery. You also will be asked to turn, cough, and take deep breaths while you are in bed to prevent lung problems and blood clots.

The discomfort around your incision will be the greatest during the first 2 to 3 days. It will decrease a little bit every day after that.

Staples should be removed at your follow-up visit with your surgeon, about 2 weeks after your surgery.

Activity

Your diet and activity will depend on your surgeon's orders. Most times, you will be able to increase your activity each day. Your instructions may be different if:

- **You have a foot ulcer.** You may need to spend more time in bed or in a chair until healing has begun.
- **Your bypass graft crosses a joint.** You may be instructed not to bend this joint at a sharp angle until you are fully healed. For example, if your graft crosses your knee, you will be advised not to kneel.

Walking is an important part of your recovery. It reduces leg swelling, helps your incision heal, and increases your overall strength.

Care at Home

You may feel a little weaker and more tired after your surgery. This is normal. It may take several weeks for you to feel like yourself again. As you resume your usual activities, be sure to rest when you need to.

Driving

Your reaction time may be slower than usual as you recover from surgery, especially if you are taking narcotic pain medicine. Do **not** drive until you have permission from your health care provider.

Incision Care

- Unless you are told otherwise, you may shower and gently clean your incisions with mild soap and water. Do not scrub them.
- After showering, do not rub your incisions. Gently pat them dry with a clean towel. Or, use a hairdryer on the “warm” setting to dry the area.
- When your staples are removed, your doctor may place small pieces of tape called Steri-Strips along your incisions. Steri-Strips help support the incision for a few days. They usually begin to peel away after 5 to 7 days, and can then be pulled off. You can shower with these in place.
- Do not use creams or lotions on your incision right after surgery unless your surgeon tells you otherwise.

Swelling

Do not stand or sit with your feet down for long periods of time.

You will have some swelling of your leg or foot for a while after your surgery. You can help decrease the swelling by raising your feet and legs above the level of your chest when you are sitting or resting. Your health care provider may prescribe compression stockings or elastic bandages to reduce the swelling.

Foot Care

Even though your blood flow has been improved, you must continue to take good care of your feet and toes:

- **Check your feet every day for areas of irritation.** Check between your toes for sores and cracking of the skin. Check for areas of redness, swelling, or drainage. Report any of these to your provider.
- **Do not soak your feet.** Soaking removes natural oils and dries the skin. Wash your feet with mild soap and lukewarm water. Dry them well.

After surgery, keep your feet raised when you are not walking. Sitting for a long time with your feet down will cause leg swelling.

Questions?

Weekdays from 8 a.m. to 4 p.m., call the Surgical Specialties Nurse Advice Line at 206-598-4549

After hours and on weekends and holidays, call 206-598-6190 and ask for the Vascular Surgery Resident on call to be paged.

Or, call your attending vascular surgeon,

Dr. _____.

- **Apply perfume-free cream or lotion to the dry skin on your legs and feet, but not between your toes.**
- **Trim your nails even with the ends of your toes.** File rough nail edges until they are smooth. If you have impaired vision, or cannot reach your feet, ask a family member or friend to help you with this. If you have diabetes, a specialist should trim your nails.
- **Do not expose your feet to extreme heat or cold, or to strong chemicals or disinfectants.**

Diet

To heal, your body needs protein, vitamins, and minerals. Vitamin A, vitamin C, and zinc are especially important. Your health care provider or a dietitian will talk with you about any changes in your diet before you leave the hospital.

Synthetic Grafts

If synthetic (man-made) graft material was used for your bypass, you may need to take antibiotics before having any surgery, dental work, or invasive procedure in the future. Antibiotics help prevent possible infection.

You will need to follow this precaution for the rest of your life. Talk with your dentist if you have any questions about antibiotics. Be sure to tell any new health care providers or dentists that you have a synthetic bypass graft.

When to Call the Doctor or Nurse

There should be little or no drainage from your incisions. Call your health care provider or nurse if you have:

- A fever of 101°F (38.5°C) or higher. It is normal for your temperature to go up after surgery. But, if it gets higher than 101°F, call the Surgical Specialties Nurse Advice Line at 206-598-4549.
- Bleeding or increased pain, swelling, redness, or warmth at the incision site.
- Increased pain in your leg.
- Drainage from your incision.
- A change in the color or temperature of the leg that was operated on.

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